

# Hypertension prevalence: an examination of urban and rural Haiti

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## Abstract

**Background** With the burden of disease shifting from communicable to non-communicable diseases, hypertension is rising as a major health concern in developing nations. Absence of data for surveillance and effect of non-communicable diseases restrict the ability of stakeholders to respond effectively. We aim to estimate the prevalence of hypertension in Haiti and analyse differences in hypertensive status among urban and rural location, age, and sex.

**Methods** We reviewed medical charts at two Haitian clinics: one in the urban city of Port-au-Prince and one in the rural village of Marmont in the Central Plateau, and recorded age, sex, weight, blood pressure, location of patient (urban vs rural), and present treatments and which specific medications. Participants included all non-pregnant outpatients older than 25 years who visited the clinics at least once between Jan 1, 2011. and June 15, 2013. 1019 patients were included in the study; 520 from Port-au-Prince and 490 from Marmont.

**Findings** The overall prevalence of hypertension was 34·4% (n=351, 95% CI 31·8–37·8); with a prevalence of 31·6% (n=167, 95% CI 27·6–35·3) in Port-au-Prince and a prevalence of 37·6% (n=184, 95% CI 34·5–40·9) and Marmont. Younger participants had lower rates of hypertension than did older participants. Patients aged 25–34 years had a hypertension prevalence of 12·0% (n=41), aged 35–44 years of 23·8% (n=51), aged 45–54 years of 46·9% (n=91), aged 55–64 years of 58·6% (n=65), and aged older than 65 years of 65·6% (n=103). No observable differences were noted between locations within the same age group. When sex was compared, 34·7% (n=227) of women and 34·0% (n=124) of men were hypertensive. Women in the rural location had a significantly higher prevalence (39·0%, n=122) of hypertension than women in the urban location (30·8%, n=105, p=0·028). Of 351 total hypertensive participants, only 54·1% (n=190) showed any evidence of being prescribed antihypertensives in their chart.

**Interpretation** This study suggests that hypertension is a major health problem in Haiti. Interventions are needed to address the proper management of hypertensive patients through medications and follow-ups, particularly in rural hypertensive women. Further research needs to be done to confirm the increased hypertension prevalence in rural locations in Haiti and to explore the causes of the differing hypertension prevalence in populations by location and sex.

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## Contributors

SAB, AAJ, and JJ collected the data. All authors contributed to the statistical analysis, compilation of results, and writing of the Abstract.

## Declaration of interests

We declare that we have no competing interests.

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